







# Purchase Contract Gas exchange (photosynthesis) system (Gas Analyzers 2019, part No. 2)

#### SELLER

Name

LI-COR GmbH

Registered office

**Bad Homburg, Germany** 

Comp. No (IČO)

VAT No (DIČ)

DE 213 054 107

Incorporated in:

Bad Homburg court in:

Bad Homburg

Section

record HRB6992

Represented by

Mr. Glen McMurdo, European Managing Director

AND

#### BUYER

Name

Ústav výzkumu globální změny AV ČR, v. v. i.

(Global Change Research Institute)

Registered office

Bělidla 986/4a, Brno, 603 00 Brno, Czech Republic

Comp. No (IČO)

86652079

DIČ CZ86652079

Incorporated in

Register of public research institutes

Represented by

prof. RNDr. Ing. Michal V. Marek, DrSc., dr. h. c., Director

According to section 2079 of Civil Code, the above parties conclude the following contract:

#### I. SUBJECT MATTER OF CONTRACT

- The seller undertakes that it will hand over the subject matter of purchase to the buyer and the seller undertakes that it will enable the buyer to acquire the ownership rights for the subject matter of purchase and the buyer undertakes to take over the subject matter of purchase and pay the purchase price for it to the seller.
- The seller also undertakes to hand over the documents concerning the subject matter of contract.

#### II. SUBJECT MATTER OF PURCHASE

- 1. The subject matter of purchase is a Gas exchange (photosynthesis) system (2 pieces).
- 2. The subject matter of purchase is specified in more details in Annex No. 1 to this contract.
- 3. The part and accessories of the subject matter of purchase are specified in more detail in Annex No. 1 of this contract.
- 4. The subject matter of purchase will be handed over in compliance with the following documents (ordered according to the degree in which they are binding):
  - a) This contract.
  - b) Written instructions from the buyer.
  - c) Technical standards concerning the materials and activities performed on the basis of this contract
- 5. Together with the subject matter of purchase, the seller will hand over to the buyer the documents necessary for the handover and use of the subject matter of purchase. These documents include mainly the following:
  - a) Certificates and declarations of conformity for materials and products used.
  - b) Detailed instructions or manuals for use of the subject matter of purchase.
  - c) Detailed instructions or manuals for maintenance of the subject matter of purchase.

The documents will be prepared in Czech or English language.

6. The Seller undertakes to perform servicing of the subject matter of purchase for the time of duration of the guarantee period.

#### III. HANDOVER OF THE SUBJECT MATTER OF PURCHASE

- 1. The complete and faultless subject matter of purchase will be handed over latest within 5 weeks from the signature of the contract.
- 2. Earlier fulfilment is allowed.
- 3. The subject matter of purchase will be handed over at the workplace of the buyer at **Bělidla 986/4a**, **603 00 Brno**, **Czech Republic**, unless the parties agree otherwise.
- 4. If the seller supplies more items than agreed, the purchase contract is also concluded for the excessive amount and the price of the excessive amount is included in the total purchase price.
- 5. The seller undertakes to hand over the subject matter of purchase unused and without any legal or material defects.
- 6. The effect of the handover do not occur before the moment when the buyer is allowed to handle the subject matter of purchase at the place of handover.
- 7. Latest within 5 working days from the day on which the subject matter of purchase is handed over, the buyer will inspect it and check its apparent properties and quantity. Within the same deadline, the buyer will either confirm takeover of the subject matter of purchase or state its objections concerning the quantity and apparent properties of the subject matter of purchase. If the buyer neither confirms takeover of the subject matter of purchase nor states its objections concerning the quantity and apparent properties of the subject matter of purchase, it is understood that the buyer took the subject matter of purchase over and that it does not have any objections concerning its apparent properties and quantity.
- 8. The fulfilment cannot be refused, even if the conditions of section 1912 (1) of Civil Code are met (mutual fulfilment).

#### IV. PURCHASE PRICE

1. The purchase price for fulfilment according to this contract was agreed:

Item	Quantity	Price for 1 piece in CZK excl. VAT	Sum price in CZK excl. VAT
Gas exchange (photosynthesis) system	2 pcs	CZK 1.261.555	CZK 2.523.110
TOTAL price CZK excl. VAT.			CZK 2.523.110

- 2. The price is agreed for the basis of unit prices as the sum priced items.
- 3. The price is agreed as the highest permissible price including all the costs of the seller for fulfilment of this contract and price influences in the course of fulfilment of this contract.
- 4. VAT of the statutory rate will be added to the price excluding VAT.

#### V. PAYMENT TERMS

- 1. The price for the delivery of the subject matter of purchase and service performed will be paid based on one invoice, unless specified otherwise by the buyer. An annex of the invoice will be a copy of the handover of the subject matter of purchase.
- 2. All the invoices shall include the particulars of a tax document.
- 3. If the seller becomes an unreliable VAT payer pursuant to section 160a of VAT act, the seller is obliged to inform the buyer about this fact in writing immediately, latest the next workday after the decision about this fact comes into legal force. In the same way, the seller is obliged to inform the buyer that proceedings have been commenced against it pursuant to section 106a of VAT act.
- 4. The buyer will pay VAT to the account of the relevant tax administrator in the following cases:
  - a) If the seller publishes information that it is an unreliable VAT payer as of the day of taxable supplies or
  - b) If the seller becomes an unreliable VAT payer before the price is paid or
  - c) In case of any doubts of the buyer whether the seller is an unreliable VAT payer or not.
- 5. The due date of all the invoices is 25 days from the day on which the invoice is issued.
- 6. The buyer is entitled to return an invoice with defects within the due date period. The seller is obliged to submit a new invoice or a corrected invoice with a new due date specified.
- 7. The seller is obliged to deliver the invoice to the address of the registered office of the buyer latest within 5 working days from the day on which the confirmation of the subject matter of purchase handover.
- 8. An invoice is paid on the day when the corresponding amount is written off the buyer's account.
- 9. No advance is provided. No deposit is provided.

#### VI. GUARANTEE OF QUALITY AND COMPLAINTS

- 1. The seller provides a guarantee for quality of the subject matter of purchase. For the whole duration of the guarantee period, the subject matter of purchase:
  - a) will be fit for use for the purpose stipulated in this contract.
  - b) will be fit for use for the usual purpose.
  - c) will keep its usual properties.

- 2. The seller provides a guarantee for quality for a period from 12 months.
- 3. The guarantee period starts to run on the day when the subject matter handover is confirmed. The guarantee period is extended by the time starting from the day when a complaint is made and ending on the day when the defect is rectified.
- 4. The buyer is not in delay with claiming a defect if the right for the defect which the subject matter of purchase has at the moment of its handover is claimed in writing within 30 days from the day on which the buyer learns about the defect.
- 5. The Seller is not in delay with rectification of a defect if the seller starts to perform activities aiming at the defect rectification without any unnecessary delay after the defect is claimed; continues this activity duly and latest within 25 workdays from the moment when the defect is claimed it rectifies the defect or replaces the subject matter of purchase with a defect-free one.

#### VII. INTERESTS ON OVERDUE PAYMENTS AND CONTRACTUAL PENALTIES

- 1. The party which is in delay with payment of a debt can be asked by the other party, if it fulfils duly its contractual and statutory obligations, to pay an interest on overdue payment, with the exception of the cases when the party which is in delay is not responsible for the delay. The parties agree on an interest on overdue payment at the amount of 0.025 % from the due amount per day.
- 2. The buyer will charge a **contractual penalty** of **CZK 5,600.00 per day** in the following cases:
  - a) Delay of the seller with handover of the subject matter of purchase.
  - b) Delay with rectification of a defect on the subject matter of purchase at the moment of its handover.
  - c) Delay with rectification of a guarantee defect.
- 3. The buyer will charge a contractual penalty of CZK 50,000.00 in case the seller does not inform the buyer that the seller has become an unreliable VAT payer or that proceedings have been commenced against the seller pursuant to section 106a of VAT act.
- 4. A separate invoice will be issued for the contractual penalty with the due date of 30 days. The day of taxable supplies is considered to be the day on which the invoice is issued.
- 5. The parties agree that the obligation to pay a contractual penalty does not affect the right for damage compensation at the amount at which it exceeds the contractual penalty. If a contractual penalty is decreased by the court, the right for damage compensation remains at the amount at which the damage exceeds the amount determined by the court as adequate, without any other limitations.

#### VIII. CONTRACT TERMINATION

- 1. The contract can be terminated by a written agreement.
- 2. The buyer can withdraw from the contract in case of its significant breach by the seller. A significant breach of the contract is considered to be among others:
  - a) Delay of the seller with handover of the subject matter of purchase by more than 30 days.
  - b) Commencement of bankruptcy proceedings in which the seller is in the position of the debtor.
  - c) If it is established that untrue data were included in the bid from the seller in connection with the public contract.

- 3. The seller can withdraw from the contract in case of its significant breach by the buyer. A significant breach of the contract is considered to be among others:
  - a) Commencement of bankruptcy proceedings in which the buyer is in the position of the debtor.
  - b) Delay of the buyer with settlement of an invoice by more than 30 days.
- 4. Withdrawal must be made in writing and it becomes valid when delivered to the other party.
- 5. Withdrawal from the contract does not cancel the mutual vindicatory liability of the parties.

#### IX. RESPONSIBLE PERSONS OF THE PARTIES

- The representative of the buyer is Ing. Karel Klem, Ph.D., <u>klem.k@czechglobe.cz</u>, +420 511 192 257. This representative of the buyer can act on behalf of the buyer in connection with this contract in any respect, but he is not allowed to change or terminate this contract.
- 2. The representative of the seller is **Mr Glen McMurdo**. This representative of the seller can act on behalf of the seller in connection with this contract in any respect, but he is not allowed to change or terminate this contract.

#### X. JOINT PROVISIONS

- 1. The right of ownership for the subject matter of purchase is transferred at the moment when the subject matter of purchase is handed over to the buyer.
- 2. Without written consent from the other party, none of the parties is allowed to transfer a receivable or liability arising from this contact to a third party.
- 3. Each of the parties accepts the risk of a change of circumstances pursuant to section 1765 of Civil Code for its debts arising on the basis of this contract.
- 4. No rights and obligations can be inferred from practices introduced by the parties or customs observed as a standard, both generally and in the particular field, concerning the subject matter of fulfilment of this contract.
- 5. If any of the provisions of this contracts becomes imaginary (petty), the impact of this defect on the other provisions of this contract will be assessed similarly according to section 576 of Civil Code.
- 6. The parties exclude application of the following provisions of Civil Code to this contract: section 557 (contra proferentem rule).
- 7. The seller is aware of the fact that it is a person obliged to cooperate during financial inspection. The seller is obliged to bind all its subcontractors to cooperate during a financial inspection.
- 8. The parties agree that the court competent to negotiate and decide all the potential disputes arising between the buyer and the seller pursuant to this contract or in connection with it is the general court of the buyer.

#### XI. FINAL PROVISIONS

- 1. This contract is governed by Czech legal regulations with the exception of colliding provisions. All the connected negotiations are held in Czech, Slovak or English.
- This contract does not depend on any other contact. No other contract depends on this contract.

- 3. This contract contains full agreement concerning the subject matter of the contract and all the particulars the parties were supposed to and wanted to agree in the contract and which they consider important for binding character of this contract. No statement of the parties made during negotiations concerning this contract may be interpreted in contradiction with the explicit provisions of this contract and it does not establish an obligation of any of the parties.
- 4. This contract can only be changed in writing in the form of numbered supplements to this contract. The parties can object invalidity of the contract or its supplement anytime due to the failure to observe the form, even if the fulfilment has already started.
- 5. The parties are aware that this contract meets the requirements specified in Act No 340/2015 Coll. and therefore it is subject to the obligation to be published in the register of contracts. The buyer undertakes to enter the contract in the register of contracts within the statutory period and send a confirmation that the contract was published to the seller upon its request.
- 6. This contract is prepared in two counterparts and each party will obtain one of them.
- 7. The following annexes are an integral part of this contract:
  - a) Annex No. 1: Technical specification of the subject matter of purchase
- 8. This contract comes into force at the moment when it is published in the register of contracts.

Bad Homburg, on this day 14 February 2019

Brno, on this day

2 9. 05. 2019

Mr Glen McMurdo
European Managing Director
LI-COR GmbH

prof. RNDr. Ing. Michal V. Marek, DrSc., dr. h. c.

Director

Ústav výzkumu globální změny AV ČR, v. v. i. (Global Change Research Institute)

ÚSTAV VÝZKUMU GLOBÁLNÍ ZMĚNY AV ČR, v.v.i.

CzechGlobe

603 00 Brno, Bělidla 4a

(2)

## ANNEX No. 1: Technical specification of the subject matter of purchase

Subject matter of purchase will fulfil all followed technical parameters:

### Gas exchange (photosynthesis) system (2 pieces)

Manufacturer: LI-COR Inc.

Type: LI-6800P

#### General description:

The subject of the tender is a portable open gas exchange (photosynthesis) system designed to measure  $CO_2$  exchange rate ( $CO_2$  assimilation, respiration),  $H_2O$  (transpiration) and derived parameters at leaf, plant or soil level (hereafter: the instrument). The instrument must be based on the measurement of  $CO_2$  and  $H_2O$  concentration through non-dispersive infrared analyzers located directly in the measuring head to ensure fast measurement response and low noise to signal ratio. The instrument must contain 2  $CO_2$  analyzers and 2  $H_2O$  analyzers. One of the analyzers always serves as a reference, and the other serves for sample measurement.

#### Technical parameters:

- 1. CO<sub>2</sub> analyzers must be able to measure CO<sub>2</sub> concentration in a minimum range of 0-3000 ppm with a precision of 0.1 ppm (at a CO<sub>2</sub> concentration of 400 ppm).
- 2. H<sub>2</sub>O analyzers must allow the H<sub>2</sub>O concentration to be measured in the minimum range of 0 70 000 ppm with an accuracy of 10 ppm (at a concentration of H<sub>2</sub>O of 10 000 ppm)
- 3. Air flow through the assimilation chamber must be user-adjustable within a minimum range of 0 1300  $\mu$ mol / s.
- 4. The instrument must be designed as an open, allowing independent electronic control of the CO<sub>2</sub> and H<sub>2</sub>O concentration, temperature and incident light (PAR) using the control software.
- 5. The instrument must allow both manual and automatic mode of measurements based on an adjustable protocol where the measurement conditions (e.g. PAR intensity, CO<sub>2</sub> concentration, temperature) are set automatically, and the measured data are automatically stored.
- 6. The control system for CO<sub>2</sub> concentration must be able to accurately set the input concentration of CO<sub>2</sub> in a minimum range of 0-1 900 ppm. The concentration must be adjustable in step 1 ppm or less.
- 7. The control system for relative air humidity must allow control in a minimum range of 0-90% and must be based on a combination of desiccant and a moisturising ceramic substrate.
- 8. The instrument must be able to control the air temperature in the assimilation chamber, for example by a Peltier cell. The minimum temperature control range must be within the range of -9 to +9 ° C relative to ambient air temperature.

- 9. The assimilation chamber must be able to measure gas exchange parameters from the minimum leaf area 8 cm<sup>2</sup>. The same minimum area must be homogeneously illuminated by an integrated light source.
- 10. The light source must be LED-based and allow to adjust the ratio of red and blue components of the light. The light source must be adjustable in the minimum intensity range of the photosynthetic radiation (PAR) between  $0-2~000~\mu\text{mol.m}^{-2}.\text{s}^{-1}$ . The blue light must be adjustable in a minimum range of  $0-400~\mu\text{mol.m}^{-2}.\text{s}^{-1}$ , red light in a minimum range of  $0-1~600~\mu\text{mol.m}^{-2}.\text{s}^{-1}$ . The light heterogeneity must not exceed  $\pm~15\%$  over the average intensity.
- 11. The measuring head must be equipped with a PAR intensity sensor inside the assimilation chamber, an external PAR sensor, and a thermocouple for measuring leaf temperature.
- 12. The instrument must be supplied with two pcs of rechargeable batteries with a minimum capacity of 6500 mAh per battery and battery charger and must allow power supply via 230 V; these batteries must allow operating the device in the field without AC power.
- 13. The instrument must be operated using the touchscreen.
- 14. The weight of the console, including the batteries, must not exceed 7.5 kg, the weight of the measuring head, including the light source, must not exceed 3 kg.
- 15. The instrument must be able to provide measurement at a minimum temperature range of  $0-45\,^{\circ}$  C.
- 16. Communication with external devices must be provided via the RJ-45 Ethernet port. The device must be able to store data on a storage medium with a storage capacity of at least 8GB that will be shipped with the device.

